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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,926	04/24/2006	Dominique Benimeli	21.1046	7620

7590 11/14/2006
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EXAMINER

AURORA, REENA

ART UNIT PAPER NUMBER

2862

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/527,926

Applicant(s)

BENIMELI ET AL.

Examiner

Reena Aurora

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 4 is/are rejected.
- 7) ☒ Claim(s) 5 - 8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/16/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

The drawings are objected to because the first and last fig lacks a legend such as FIG 1 and FIG 5B. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid

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abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: At page 13, line 23, discloses figure 3B which is not in drawings and on page 14, lines 4 and 15, figure 6A and 6B are disclosed which is not shown in drawings.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gissler et al. (5,680,049).

As to claims 1 - 4, Gissler et al. (hereinafter Gissler) discloses an apparatus for measuring the resistivity of earth formation comprising a body of a probe, that is approximately cylindrical, defining an axial direction of the probe, a set of at least three

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primary voltage measurement electrodes (208BA, 208BB, 208BC, FIG. 10A, 10B), two end electrodes (208BA, 208BC), one upper electrode (208BA) and one lower electrode (208BC) and at least one central electrode (208BB), a spacing between two consecutive electrodes in this set of primary electrodes (208BA, 208BB, 208BC) in the axial direction of the body of the probe with an average spacing value (col. 18, lines 23 - 27), two electrodes (208AA, 208AB), an upper (208AA) and a lower (208AB) current injection electrodes arranged along the axial direction of the body of the measurement probe, on each side of the set of primary electrodes (208BA, 208BB, 208BC), wherein the probe also comprises, two secondary voltage measurement electrodes (208BE, 208BD) arranged along the axial direction of the probe on each side of the set of the primary electrodes (208BA, 208BB, 208BC), and a first secondary electrode (208BE) between the two injection electrodes (208AA, 208AB), located between the upper current injection electrode (208AA) and the upper voltage measurement electrode (208BA), the other (208BD) being located between the lower current injection electrode (208AB) and the lower end voltage measurement electrode (208BC) (col. 19, lines 20 - 32). Gissler fails to disclose that the spacing between a secondary electrode and the closest primary end electrode being more than 1.5 times the average spacing between the primary electrodes. However increasing the spacing between the secondary electrode and the closest primary end electrode will increase the area of measurement of resistivity of earth formation. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Gissler by increasing the spacing between the secondary electrode and the closest

primary electrode would increase the area of measurement of resistivity of earth formation.

Allowable Subject Matter

Claims 5 – 8 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: As to claims 5 – 8, the prior art fails to show a second position being at a distance from the closest end position of more than 1.5 times the average value of the spacing between consecutive positions to deduce a second profile for the variation of the resistivity along the axial direction and then to correct the first profile by replacing resistivity values of the first profile for the first axial positions by resistivity values of the second profile when the resistivity values of the second profile at the same first axial positions are greater than the first values, the profile thus corrected forming the improved profile.

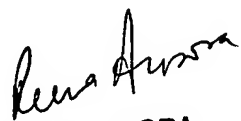
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Reena Aurora


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PRIMARY EXAMINER
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